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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,085

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Petri Silenius

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SUITE 1105

1215 SOUTH CLARK STREET

ARLINGTON, VA 22202

EXAMINER

CORDRAY, DENNIS R

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,085	Applicant(s) SILENIUS ET AL.	
	Examiner DENNIS CORDRAY	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 8, 9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8, 9, 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

The amendments to the Specification, filed 6/29/2010, have been entered. The amendment does not add new matter, but corrects errors that would have been recognized by one of ordinary skill in the art as well as the appropriate correction thereof. The Gurley number represents the time for a predetermined amount of air to penetrate the test substrate, thus an increase in the number would indicate a decrease in permeability and porosity of the substrate or, alternatively, an increase in permeability resistance. It is also generally known that an increase in the amount of inorganic filler generally increases the permeability (see for instance, Hampl, Jr., US 5888348, col 1, lines 55-61).

The Double Patenting rejections over Applications 10/475773, 10/532481 and 11/808273 have been withdrawn because the applications have been abandoned.

Applicant's arguments filed 6/29/2010 have been fully considered but they are not persuasive.

Applicant argues that the amended claims require the proportion of deposited precipitated calcium carbonate particles to be from 70-85% of the weight of the filler and that the air permeability of the paper or board product does not change by more than 10% when the amount of filler is increased from 10% to 30% by weight, based on the weight of a precipitated precipitated calcium carbonate component and on the weight of the web. Applicant further argues that the only specific amount of calcium carbonate of

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the filler disclosed by Silenius is 69.7%. Applicant also argues that the air permeability resistance in Example 2 of Silenius changes by 21.9% when the amount of filler is increased from 17.8% to 22.4%.

Regarding the claimed proportion of deposited precipitated calcium carbonate particles of from 70-85% of the weight of the filler, Silenius discloses a proportion of calcium carbonate to filler of preferably 0.1 to 90% and most suitably 60-80%, which significantly overlays the claimed range. While an example having a proportion of 69.7% is used, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In *re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In *re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994) Furthermore, "[t]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." In *re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

While air permeability and air permeability resistance may be related, they are not the same and a 21.9% change in the latter does not necessarily mean a 21.9% change in the former. Applicant teaches that the air permeability is in general characterized using the Gurley number, but does not disclose the relationship between air permeability and air permeability resistance. The example of Silenius uses an amount of calcium carbonate of the filler of 69.7%, which is outside of the claimed range

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and, in addition, does not disclose the percent change in air permeability over the claimed range. The examples presented in the instant Specification show a greater than 10% change in air permeance resistance in every case over a range of PCC concentration from about 10% to about 20% (see Figure). For instance, the sample with the least amount of change contains 82% calcium carbonate, and the air permeance resistance changes from about 2 to about 1.7, or about 15%, when the amount of PCC in the paper changes from 10 to about 21%. There is no evidence that the relationship is linear as depicted, because only two points are shown, and no way of extrapolating the data to predict what the value would be if the PCC concentration were to be raised to 30% or to predict what the change in air permeability would be if the PCC concentration were to be raised from 10% to 30% as claimed.

The paper made by Silenius et al has a substantially identical structure to the paper made by the claimed process and will have the claimed air permeability for reasons given in the outstanding rejections.

The outstanding rejections over the cited prior art are maintained, but have been modified to address the amended claims.

Claim Rejections - 35 USC § 102 and USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 8, 9 and 11-15 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Silenius (WO 02/92909).

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Silenius discloses method of making a paper or base web comprising adding a filler to a papermaking pulp, thus a paper comprising a base web and a filler is produced (p 4, line 26 to p 5, line 2). The filler comprises calcium carbonate, calcium oxalate, calcium sulfate or barium sulfate aggregates (inorganic salt particles) precipitated on cellulose fibrils from an aqueous solution (p 2, lines 12-16; p 3, lines 24-27). The filler comprises cellulose fibrils produced by refining cellulose fibers (plant fibers) and screening into a preferred screened fraction of from P100 -P400, or from 100 to 400 Mesh. Fibrils passing through a 100 Mesh screen will pass through a 50-Mesh screen. The fibrils have a thickness from 0.1-2 μm and a length from 10-400 μm (p 3, lines 13-23). The fibril dimensions significantly overlap the claimed dimensions.

Silenius discloses that the percentage by weight of calcium carbonate to filler is of preferably 0.1 to 90% and most suitably 60-80%, which overlays the claimed range. The amount of calcium carbonate in the paper is 0.1-80% by weight of the paper, which also overlays the claimed range (p 3, lines 27-31).

Paper comprising the filler is disclosed (p 9, lines 11-19, Example 2).

Silenius discloses that the paper can be coated with a layer having a weight of 5-30 gsm per side (p 5, lines 5-10; p 7, lines 20-22).

Silenius discloses that papers produced using the filler have better formation, retention, smoothness and a denser surface than when using commercial precipitated calcium carbonate. Other advantages disclosed include improved cost efficiency (p 2, lines 24-34).

While envelope paper is not explicitly disclosed by Silenius, it would at least have been obvious to one of ordinary skill in the art to make any kind of paper, including envelope paper, using the process to achieve the advantages disclosed by Silenius et al. Alternatively, any kind of paper can be made into an envelope.

The paper made by Silenius has a substantially identical structure to the paper made by the claimed process and will have the claimed air permeability because, where the claimed and prior art apparatus or product are identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

“[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art’s functioning, does not render the old composition patentably new to the discoverer.” *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

A rejection based on 35 U.S.C. 102(a) can be overcome by perfecting a claim to priority under 35 U.S.C. 119(a)-(d) by filing a certified priority document in the application and an English language translation, if the document is not in English and

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the examiner has established that the priority document satisfies the enablement and description requirements of 35 U.S.C. 112, first paragraph.

Claims 1-9 and 11 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Silenius (US 2004/0173329).

Silenius (US 2004/0173329) discloses identical subject matter to Silenius et al (WO 02/92909), detailed in the previous rejection, thus the detail will not be repeated. The subject matter is disclosed on p 1, pars 9 and 14-19; p 2, pars 23-25; and p 3, pars 36, 49 and 50; p 4, par 50.

Making envelope paper would have been obvious to one of ordinary skill in the art for reasons given above.

The paper made will have the claimed air permeability also for reasons previously given.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

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be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 and 8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 6-9 of copending Application No. 11/922595 in view of Silenius et al ('909 or '329):

Although the conflicting claims in each case are not identical, they are not patentably distinct from each other because the processes of the instant and copending applications comprise adding the same filler to a papermaking slush. The copending claims do not recite the claimed range for the amount of calcium carbonate in the filler and in the paper. As discussed above, Silenius et al ('909 or '329) discloses making paper using the same filler and also disclosed preferred ranges for the amount of calcium carbonate in the filler and paper that overlay the claimed range. One of ordinary skill in the art would have found it obvious to use the claimed ranges as a preferred range disclosed and exemplified by Silenius et al. The paper made by the method of the copending application will have the claimed air permeability for reasons given previously. Any paper can be made into an envelope, and making an envelope would have been an obvious use for the paper.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS CORDRAY whose telephone number is (571)272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Daniels can be reached on 571-272-2450. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dennis Cordray/
Examiner, Art Unit 1791

/Matthew J. Daniels/
Supervisory Patent Examiner, Art Unit 1791